FIGURE 1A

USER
100

SERVICE PROVIDER
NETWORK
102

SERVICE POLICY
DIRECTOR
104

AUTHENTICATION
SERVER
106

FIGURE 1B

USER
108

SERVICE PROVIDER
NETWORK
110

SERVICE POLICY
DIRECTOR
112

AUTHENTICATION
SERVER
114

FIGURE 1C

USER 116 — SERVICE PROVIDER NETWORK 118 — SERVICE POLICY DIRECTOR 120

SERVICE PROVIDER NETWORK 118 — AUTHENTICATION SERVER 122

FIGURE 2

REQUEST 200 → SERVICE POLICY DIRECTOR 202 → RESPONSE 204
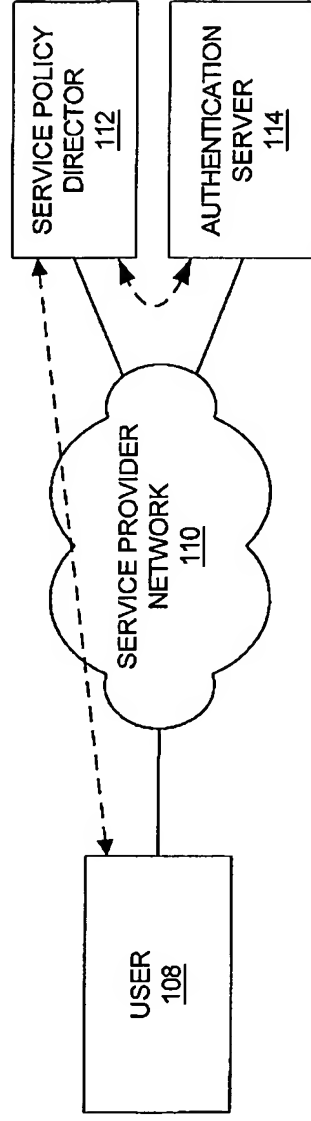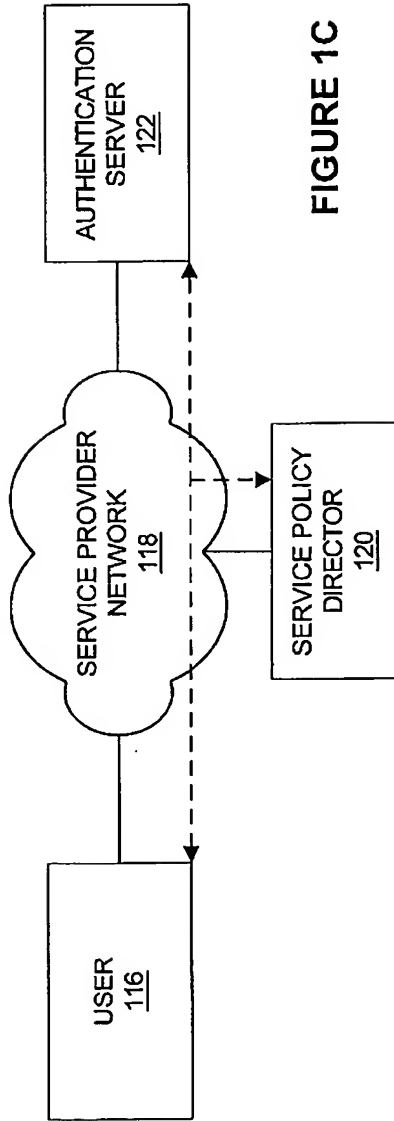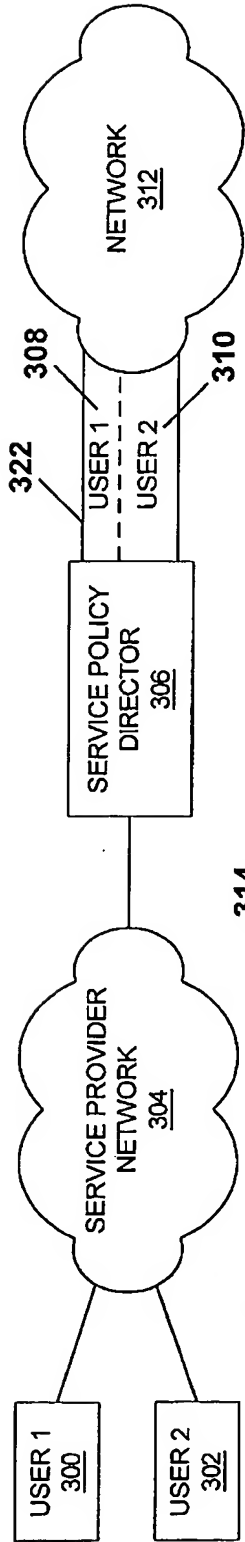
206 — {USER NAME = "JOE SMITH"
USER ADDRESS = 128.14.25.122}

210

208 — {PRIORITY = "MEDIUM"
BW LIMIT = 2 Mbps
ACCESS ALLOWED = "HTTP, HTTPS; SMTP"
ANTIVIRUS="ACTIVE"
URL FILTERING ="NON-ACTIVE"}

USER POLICY TABLE:

USER NAME	USER ADDRESS	PRIORITY	BW LIMIT	ACCESS ALLOWED	ANTIVIRUS	URL FILTERING
"JOE SMITH"	128.14.25.122	"MEDIUM"	2 Mbps	"HTTP; HTTPS; SMTP"	"ACTIVE"	"NON-ACTIVE"
. . .	. . .	. . .	. . .	. . .	. . .	. . .

212

214

USER 1
300

USER 2
302

SERVICE PROVIDER
NETWORK
304

314

SERVICE POLICY
DIRECTOR
306

322

308

310

USER 1

USER 2

NETWORK
312

FIGURE 3

USER POLICY TABLE:

USER NAME	USER ADDRESS	PRIORITY	BW LIMIT
USER 1	128.14.25.122	MEDIUM	2 Mbps
USER 2	128.14.25.129	HIGH	4 Mbps
.	.	.	.
.	.	.	.

316 318 320

FIGURE 4

NETWORK
516

SERVICE PROVIDER
NETWORK
508

SERVICE POLICY
DIRECTOR
510

USER 1

USER 2

USER 1

USER 2

USER 1

USER 2

USER 1

USER 2

504

506

USER 1
500

USER 2
502

ANTIVIRUS
CLUSTER
512

URL FILTERING
SERVICE
514

USER POLICY TABLE:

518
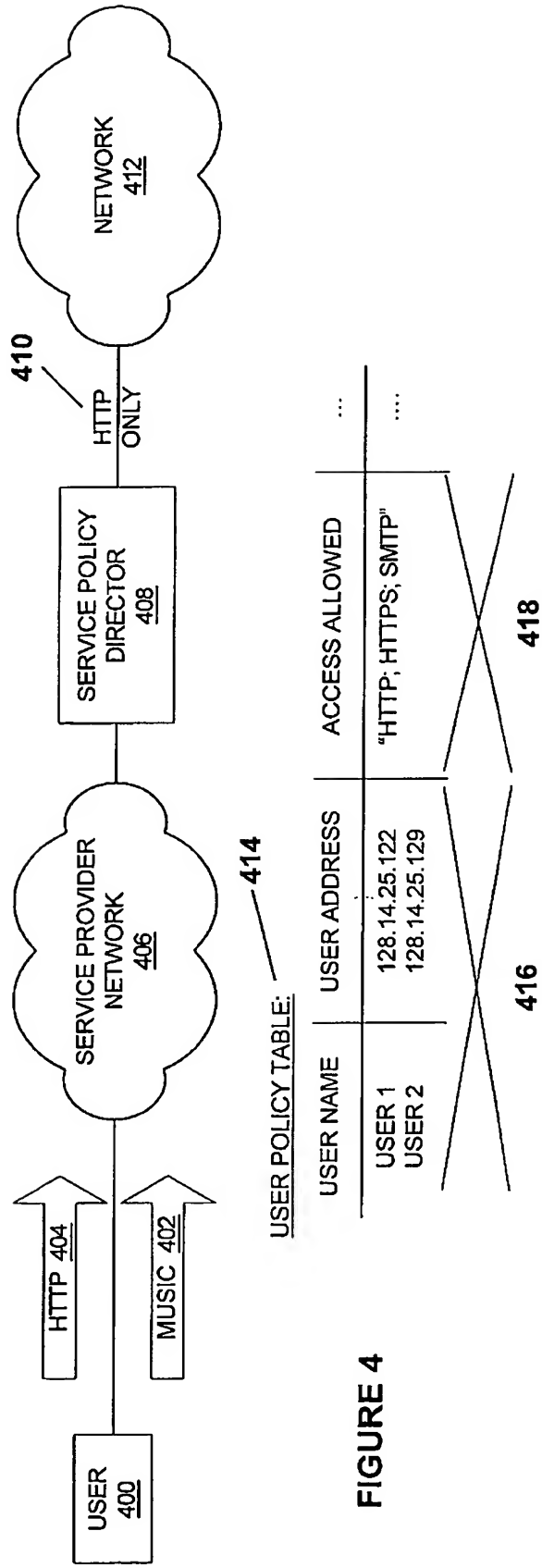
USER NAME	USER ADDRESS	ANTIVIRUS SERVICE	URL FILTERING SERVICE	· · ·
USER 1	128.14.25.122	"NON-ACTIVE"	"ACTIVE"	· · ·
USER 2	128.14.25.129	"ACTIVE"	"NON-ACTIVE"	· · ·
· · ·	· · ·	· · ·	· · ·	
520		522	524	
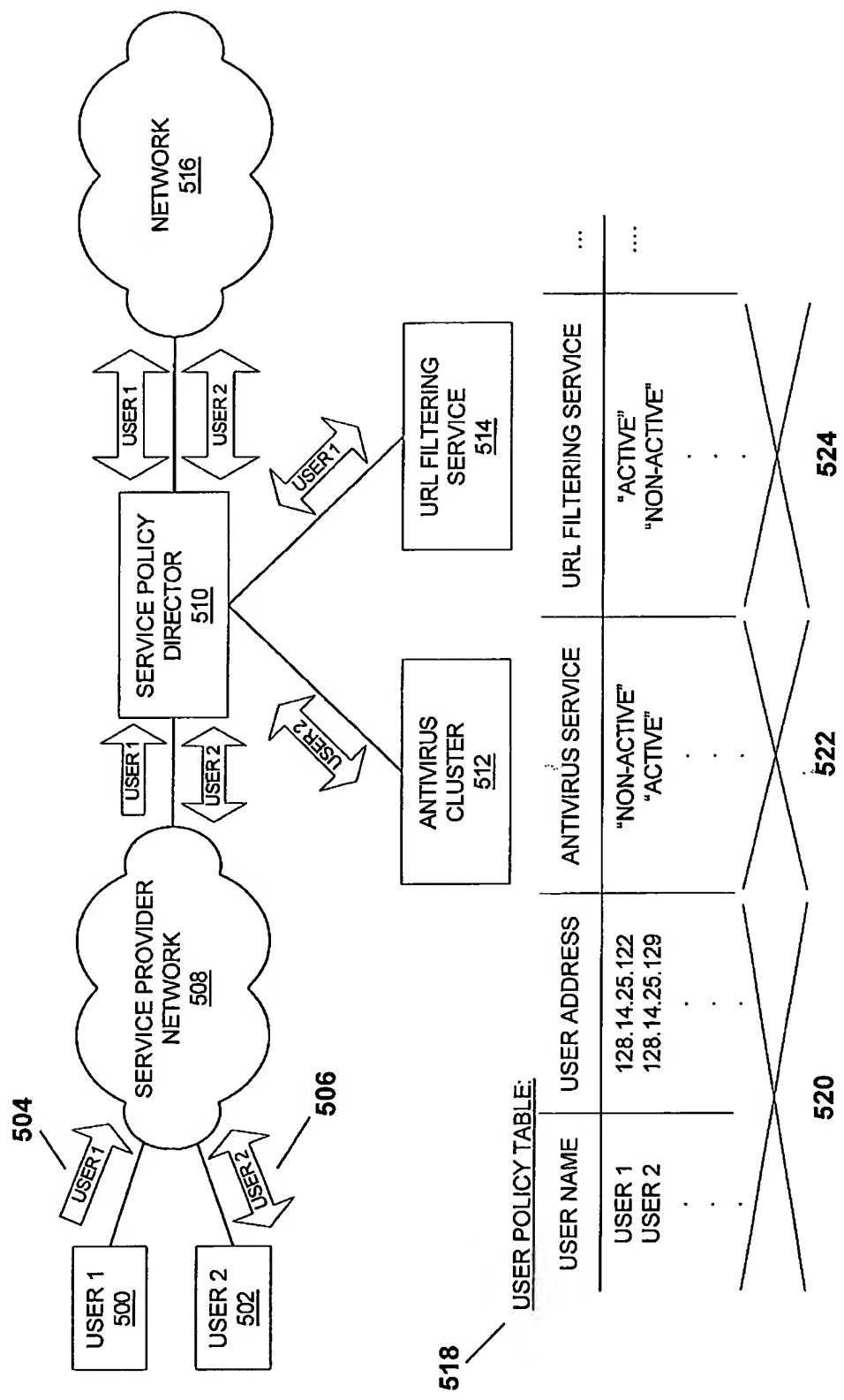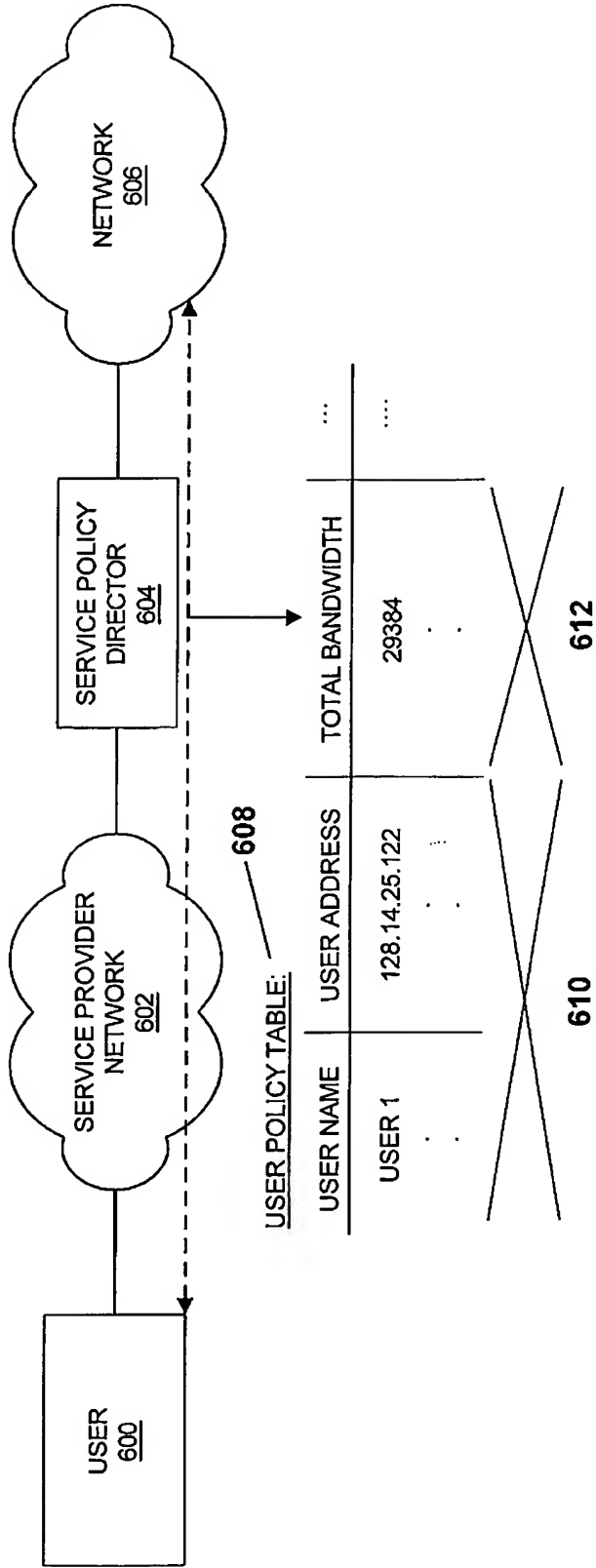
FIGURE 5

FIGURE 6A

USER POLICY TABLE:

USER NAME	USER ADDRESS	TOTAL BANDWIDTH	...
USER 1	128.14.25.122	29384	...
.	.	.	.
.	.	.	.

— 622

624

626

SERVICE POLICY DIRECTOR
620

USER
614

SERVICE PROVIDER NETWORK
616

NETWORK
618

FIGURE 6B